International Journal of Food Nutrition and Safety, 2017, 8(1): 13-31

International Journal of Food Nutrition and Safety **ISSN: 2165-896X**

Journal homepage: www.ModernScientificPress.com/Journals/IJFNS.aspx *Florida, USA*

Review

Antibacterial Properties of Natural Compounds Extracted from Plants Compared to Chemical Preservatives against *Salmonella* Spp-A Systematic Review

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Article history: Received 15 January 2017, Received in revised form 19 February 2017, Accepted 19 March 2017, Published 22 March 2017.

Abstract: Due to consumer awareness of the chemical preservatives hazards, public reception the need for medicinal plants is growing recently. In most countries contamination of food products with pathogenic bacteria (especially *Salmonella*) are followed by health and nutritional losses. Also, due to increasing to drug resistance in pathogenic microorganisms, replacement antibiotics with the natural antimicrobial compounds from plants are convenient and useful. In this review article, anti-bacterial effects of Iranian indigenous medicinal plants against *Salmonella* (during 2000 to 2016) have been investigated. This article reviewed data from 269 articles originating from WHO, Civilica, Magiran, SID, Elsevier, Science direct and PubMed etc., using the keywords essential oil, *salmonella*, antimicrobial activity, antibiotic alternative. These findings suggest that antibacterial activity of the Iranian indigenous medicinal plants against *Salmonella* was remarkably better than chemical drugs. Replacement of synthetic antibiotics with antimicrobial substances of plant origin is more essential.

Keywords: Essential oil, *Salmonella*, Antimicrobial activity, Antibiotic alternative